

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

5 Applicant(s): Grande et al.
Case: 2-1
Serial No.: 10/787,380
Filing Date: February 26, 2004
Group: 2841
10 Examiner: Abiy Getachew

Title: Method and Apparatus for Mounting a Modem to a Carrier Assembly

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APPEAL BRIEF

20 Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

25 Sir:
Applicants hereby appeal the final rejection dated October 10, 2007, of claims 1

through 20 of the above-identified patent application.

REAL PARTY IN INTEREST

30 The present application is assigned to Agere Systems Inc., as evidenced by an assignment recorded on February 26, 2004 in the United States Patent and Trademark Office at Reel 015030, Frame 0498. The assignee, Agere Systems Inc., is the real party in interest.

RELATED APPEALS AND INTERFERENCES

35 There are no related appeals and interferences.

STATUS OF CLAIMS

The present application was filed on February 26, 2004 with claims 1 through 20. Claims 1 through 20 are presently pending in the above-identified patent application. Claims 1-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hart (United States Patent Number 5,164,542) in view of Ishikawa (United States Patent Number 4,874,907).

STATUS OF AMENDMENTS

There have been no amendments filed subsequent to the final rejection.

10 SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 requires a modem module (FIG. 1: 200) for connecting to a carrier assembly (page 3, lines 1-30; FIG. 1: 170), comprising: circuitry for interfacing with a telephone line (page 2, lines 7-12); and one or more solder pads (FIG. 1: 160) for connecting the modem module to the carrier assembly (page 2, lines 16-18).

15 Independent claim 8 requires a method for fabricating a modem module for connection to a carrier assembly (page 4, lines 1-24), comprising the steps of: providing circuitry on a printed circuit board for interfacing with a telephone line (page 2, lines 7-12); and providing one or more solder pads (FIG. 1: 160) on the printed circuit board for connecting the modem module to the carrier assembly (page 2, lines 16-18).

20 Independent claim 14 requires a printed circuit board, comprising: modem circuitry for interfacing with a telephone line (page 2, lines 7-12); and one or more solder pads (FIG. 1: 160) for connecting the modem circuitry to a carrier assembly (page 2, lines 16-18).

STATEMENT OF GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

25 Claims 1-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hart in view of Ishikawa.

ARGUMENT

Independent Claims 1, 8 and 14

Independent claims 1, 8, and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hart in view of Ishikawa. Regarding claim 1, the Examiner acknowledges that

5 Hart does not specifically teach one or more solder pads for connecting said modem module to said carrier assembly, but asserts that Ishikawa teaches solder pads used to electrically and mechanically connect components to a circuit board (col. 2, lines 4-9).

Appellants note that, regarding modem 126, Hart teaches that “motherboard 124 includes a modem 126, as well as power management circuitry 128.” (Col. 6, lines 17-19.)

10 Neither Hart nor Ishikawa, however, provide many details regarding a modem. Appellants also note that the conventional method for attaching a modem to a motherboard is by integrating the modem circuitry into the motherboard, *thereby requiring that a certified motherboard be recertified following the integration.* (See, page 1, lines 13-27, of the originally filed specification.) In one aspect of the present invention, a modem module is provided that may be attached to a motherboard and thereby eliminates the need to recertify the motherboard. Hart and Ishikawa, however, do not disclose or suggest connecting a modem module to a carrier assembly, and do not disclose or suggest one or more solder pads for connecting a modem module to a carrier assembly. In fact, the prior art *teaches away* from the present invention by *teaching to integrate a modem into a motherboard without the use of a modem module.*

15 Independent claims 1, 8, and 14 require one or more solder pads for connecting said modem module to said carrier assembly.

Thus, Hart and Ishikawa, alone or in combination, do not disclose or suggest one or more solder pads for connecting said modem module to said carrier assembly, as required by independent claims 1, 8, and 14.

25 Conclusion

The rejections of the independent claims under section 103 in view of Hart and Ishikawa, alone or in combination, are therefore believed to be improper and should be withdrawn. The remaining rejected dependent claims are believed allowable for at least the

reasons identified above with respect to the independent claims.

The attention of the Examiner and the Appeal Board to this matter is appreciated.

Respectfully,

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Date: February 25, 2008

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APPENDIX

1. A modem module for connecting to a carrier assembly, comprising:
 - 5 circuitry for interfacing with a telephone line; and
 - one or more solder pads for connecting said modem module to said carrier assembly.
2. The modem module of claim 1, further comprising a tip/ring connector for interfacing with said telephone line.
- 10 3. The modem module of claim 1, further comprising a connection to a tip/ring connector.
4. The modem module of claim 1, wherein said carrier assembly is a motherboard.
- 15 5. The modem module of claim 1, wherein said one or more solder pads are soldered to corresponding one or more solder pads on said carrier assembly.
6. The modem module of claim 1, wherein said modem assembly is fabricated on a printed circuit board.
- 20 7. The modem module of claim 1, wherein said modem assembly is an integrated device.
8. A method for fabricating a modem module for connection to a carrier assembly, comprising the steps of:
 - 25 providing circuitry on a printed circuit board for interfacing with a telephone line; and
 - providing one or more solder pads on said printed circuit board for connecting said modem module to said carrier assembly.

9. The method of claim 8, further comprising the step of providing a tip/ring connector for interfacing with said telephone line.

10. The method of claim 8, further comprising the step of connecting to a tip/ring connector.

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11. The method of claim 8, wherein said carrier assembly is a motherboard.

12. The method of claim 8, further comprising the step of soldering said one or more solder pads to corresponding one or more solder pads on said carrier assembly.

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13. The method of claim 8, further comprising the step of fabricating said modem assembly on a printed circuit board.

14. A printed circuit board, comprising:

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modem circuitry for interfacing with a telephone line; and

one or more solder pads for connecting said modem circuitry to a carrier assembly.

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15. The printed circuit board of claim 14, further comprising a tip/ring connector for interfacing with said telephone line.

16. The printed circuit board of claim 14, further comprising a connection to a tip/ring connector.

17. The printed circuit board of claim 14, wherein said carrier assembly is a motherboard.

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18. The printed circuit board of claim 14, wherein said one or more solder pads are soldered to corresponding one or more solder pads on said carrier assembly.

19. The printed circuit board of claim 14, wherein said modem assembly is fabricated on a printed circuit board.
20. The printed circuit board of claim 14, wherein said modem assembly is an integrated device.

EVIDENCE APPENDIX

There is no evidence submitted pursuant to § 1.130, 1.131, or 1.132 or entered by the Examiner and relied upon by appellant.

RELATED PROCEEDINGS APPENDIX

There are no known decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of 37 CFR 41.37.